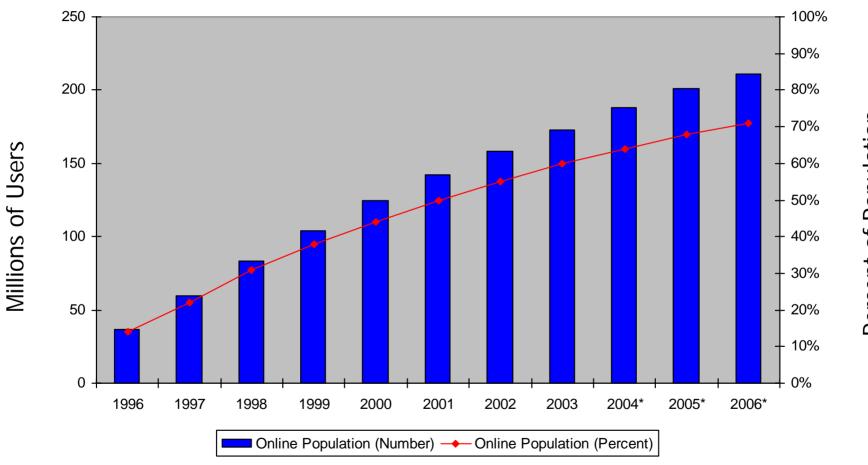
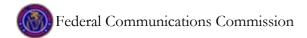
Characteristics of the U.S. Broadband Market

Donald Abelson
Chief, International Bureau
Federal Communications Commission

Internet Growth—US Households Online

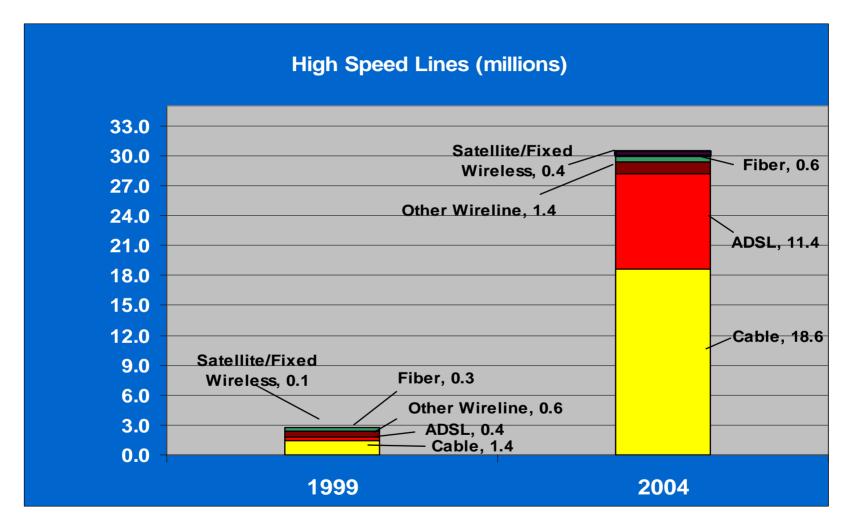


Source: The Digital Economy Fact Book, Fifth Edition 2003

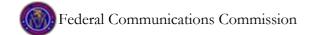


Percent of Population

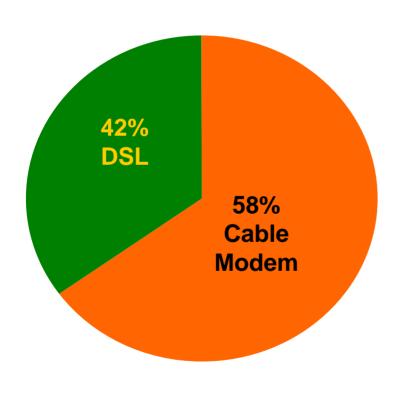
High Speed Line Growth 1999-2004



Source: FCC's High Speed Services for Internet Access Report, 6/04



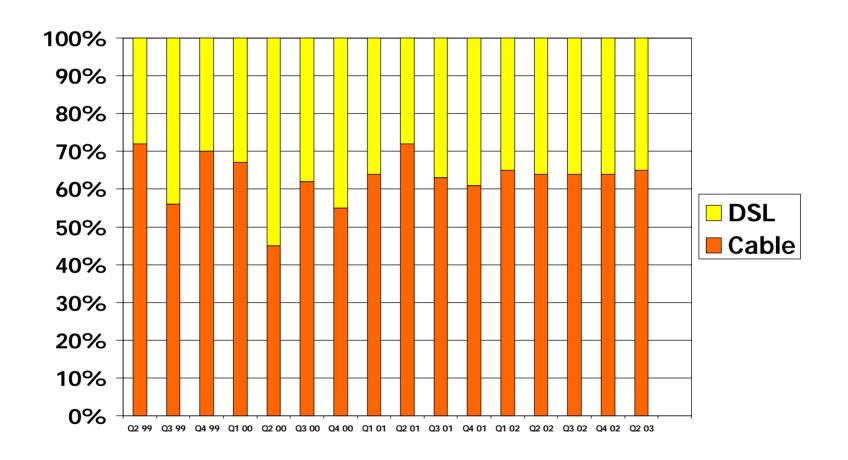
Cable vs. DSL broadband subscribers in the U.S.



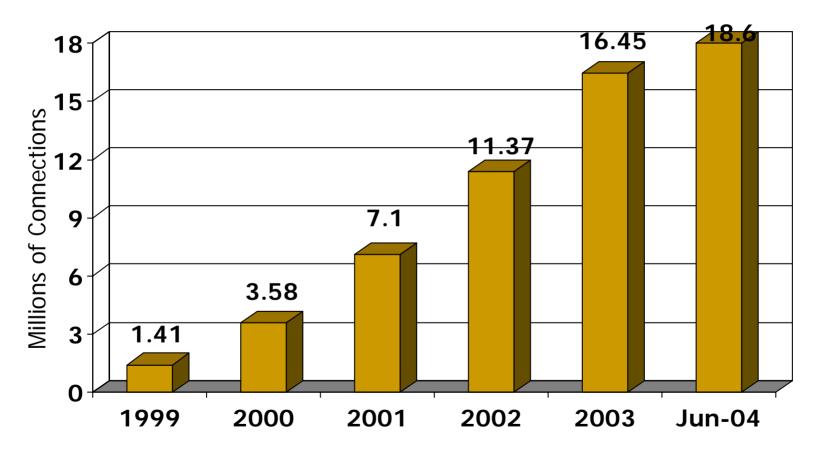
- 32.5 million total broadband connections in U.S. as of 2004
 - 11.4 million DSL connections
 - 18.6 million cable modem connections
 - 2.5 million other connections (e.g. fiber, wireless, or satellite)

Source: FCC's High Speed Services for Internet Access Report, 6/04

Historical Residential Broadband Market Share

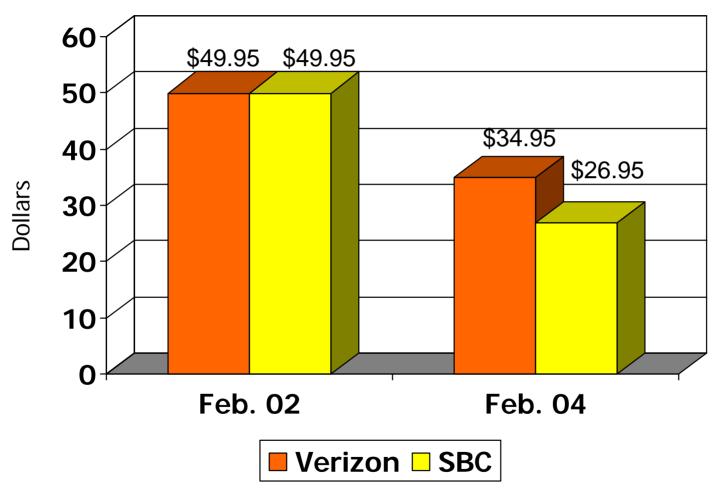


Cable Modem Growth in the U.S.



Source: FCC's High Speed Services for Internet Access Report, 12/04

DSL Price Drop

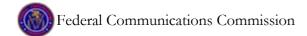


Source: USA Today, Nov. 14, 2003, p. C1; Wall Street Journal, Nov. 28, 2003

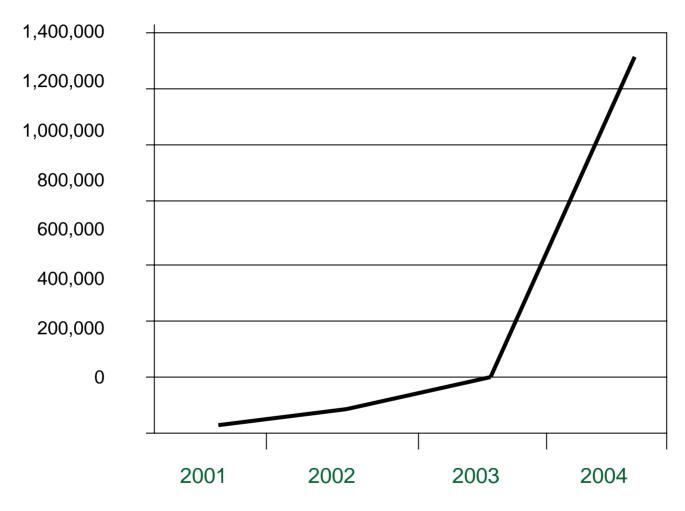
States with FTTH Deployment



Source: Telephony



FTTH Homes Passed



Source: Atlantic Engineering Group; Ex Parte Presentation, Received September 28, 2004, WC 01-338

Other New Broadband Technologies

- Wireless Broadband
 - Licensed
 - Unlicensed (Wi-Fi and WiMax)
- Broadband Over Powerlines

Wireless Broadband Access Task Force

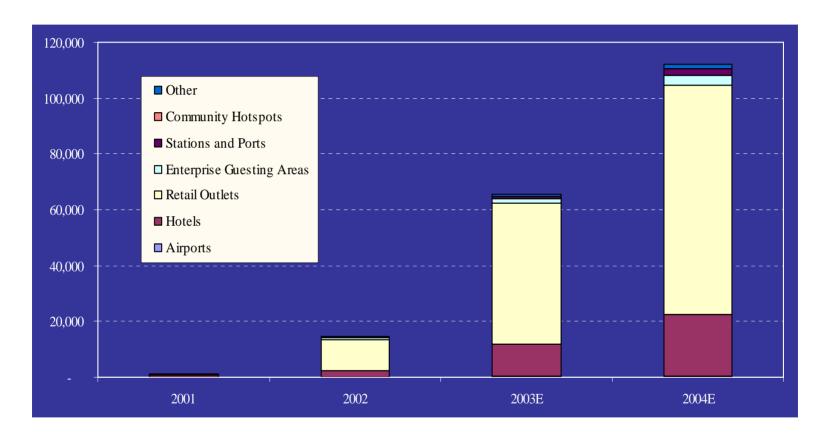
"To ensure that our nation's regulatory policies concerning wireless broadband do not impede innovation or delay service availability across America, the FCC should be vigilant and proactive in identifying and understanding emerging technologies and in ensuring that existing regulatory policies do not get in the way of these advances. Innovative technologies call for innovative regulatory policies. And the American public benefits most when regulatory policies enable consumers and businesses to fully tap the benefits of emerging wireless technologies."

Encouraging Innovation

- Voluntary frequency coordination efforts by private industry for license-exempt spectrum
- Promote voluntary industry "best practices" among unlicensed users
- Facilitate reporting of violations of technical rules for license-exempt spectrum
- Ensure FCC rules are flexible enough to allow providers to pair spectrum asymmetrically
- Apply a pro-competitive, innovative national framework for wireless broadband services
- Continue to take a pro-active, forward looking approach to regulation

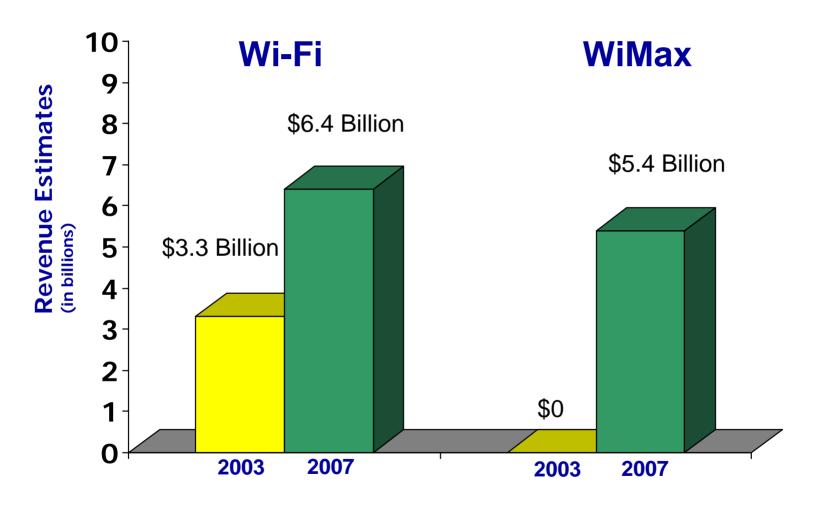
Wi-Fi Hotspots by Location

(Worldwide 2001-2004)

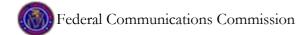


Source: Gartner Dataquest, June 2003

Wireless Innovations



Source: BusinessWeek, April 26, 2004



Broadband Over Power Lines

- Commission encouraging development of broadband over power lines
- Modifying the rules on use of unlicensed spectrum
- Will increase the availability of broadband to wider areas of the country because power lines reach virtually every home and community
- Will also enhance competition by providing another broadband alternative

Largest Broadband Markets in the World

(Millions of broadband subscribers)

